

341#

8)19/03

Sandt & Associates
900 Deerfield Court

Midland, MI 48640

(E-mail: billsandt@chartermi.net)

**FAX RECEIVED** 

AUG 1 5 2003

**GROUP 1600** 



Date	L8-14-2003	1	
To:	Asst. Commissioner of Patents Art Unit 1616 Attn: Sharmila S. Golfarnudi	From:	B.W. Sandt Attorney for Schilling et al
cc		Phone	(989) 631-6852
Fax:	(703) 305-3014	Fax	(989) 835-6030
Phone:		Pages:	8
Re:	SN 09/964,120		

Urgent For Review Please Comment Please Reply Please Recycle

Unless otherwise indicated, or obvious from the nature of this transmittal, the information contained in this Fax is <u>Confidential</u>, intended for the use of only the person or entity named above. If the reader of this message is not the intended recipient, he is hereby notified that any dissemination, distribution or copying of this message is strictly prohibited. If this message has been received in error, please immediately notify sender and destroy all copies and return the original copy to the sender at sender's expense.

## Message

Attached please find Claim Appendices to the Response D to the Office Action dated May 14, 2003, mailed August 8, 2003.

Application No. 09/964,120

Inventor: Marvin L. Schilling et al

Filed: 9/25/2001

For: Method for Producing Biologically Active Products

Examiner Sharmila S. Golumudi

Art Unit 1616

Bernd W. Sandt





## Appendix to Response D

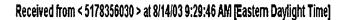
# **CLAIMS**

- Cancelled.
- Cancelled.
- 3. Cancelled
- Cancelled
- Cancelled
- Cancelled.
- 7. Cancelled.
- 8. Cancelled.
- 9. Cancelled.
- 10. Cancelled.
- 11. Cancelled.
- 12. Cancelled.
- 13. Cancelled.
- 14. Cancelled.
- 15. Cancelled.
- 16. Cancelled.
- 17. Cancelled.
- (New) A method for the dehydration of naturally occurring deleterious water-containing proteinaceous substances containing biologically active components, which comprises, combining such substances with an antimicrobial agent and an ionizing salt, heating the resulting mixture in particulate form at a temperature below which denaturization occurs until the water content is reduced to below which substantial microbial or pathogenic activity occurs, and recovering the biologically active components of the particulate in their original natural structure.

(New) The process of claim 18 wherein the ionizing salt is used in solid form.

BWS 00-07 SN.09/964,120, filed 09/25/01

-1-





PAGE

03

- 20. (New) A method for the dehydration of natural protein-containing substances, which contain water subjecting such to pathogenic and microbial activity, comprises combining such substance with an ionizable salt, in a concentration of at least 15 % by weight of the substance and an antimicrobial agent and heating the resulting mixture in particulate form at a temperature below about 110° F until the water content is reduced to below 15 %.
- 21 (New) The method of claim 18 wherein the process is carried out in the presence of an oxygen containing antimicrobial agent and an ionizable consumable salt.
- 22. (New) The method of claim 18 wherein the anti-microbial agent is a chlorine-containing compound.
- 23. (New). The method of claim 20 wherein the substance is a protein.
- 24. (New). The method of claim 23 wherein the protein is Type II collagen- containing protein.
- 25. (New). The method of claim 20 wherein the salt is sodium or potassium chloride.
- (New). The method of claim 20 wherein the dehydration is carried out at temperatures of 100 to 110°F.
- 27. (New) The method of claim 18 wherein the natural substance is from an animal.  $\vee$
- 28. (New) The method of claim 18 wherein the naturally occurring material is bone j cartilage.
- 29. (New) The method of claim 28 wherein the bone cartilage contains Type II collagen.

BWS 00-07 SN.09/964,120, filed 09/25/01



- 30. (New) The method of dehydrating chicken cartilag which comprises comminuting such, soaking the resulting product in an aqueous solution of an antimicrobial agent, blending such with potassium or sodium chloride in a concentration of at least 15 % by weight of the comminuted product and dehydrating the resulting mixture in particulate form at temperatures below 110° F until the water content is reduced to below 10%.
- 31. (New) The method of claim 30 wherein the antimicrobial agent is a hypochlorite.
- 32. (New) The process of claim 31 wherein the dehydration is carried out in the presence of hydroxy-propyl methylcellulose or lecithin.



51 7835<del>50</del>30

# Appendix II to Response D

#### NEW CLAIMS

- A method for the dehydration of naturally occurring deleterious water-containing 18. proteinaceous substances containing biologically active components, which comprises, combining such substances with an antimicrobial agent and an ionizing salt, heating the resulting mixture in particulate form at a temperature below which denaturization occurs until the water content is reduced to below which substantial microbial or pathogenic activity occurs, and recovering the biologically active components of the particulate in their original natural structure.
- The process of claim 18 wherein the ionizing salt is used in solid form. 19.
- A method for the dehydration of natural protein-containing substances, which 20. contain water subjecting such to pathogenic and microbial activity, comprises combining such substance with an ionizable salt, in a concentration of at least 15 % by weight of the substance and an antimicrobial agent and heating the resulting mixture in particulate form at a temperature below about 110° F until the water content is reduced to below 15 %.
- The method of claim 18 wherein the process is carried out in the presence of an 21. oxygen containing antimicrobial agent and an ionizable consumable salt.
- The method of claim 18 wherein the anti-microbial agent is a chlorine- containing 22. compound.
- The method of claim 20 wherein the substance is a protein. 23.
- The method of claim 23 wherein the protein is Type II collagen-containing 24. protein.
- The method of claim 20 wherein the salt is sodium or potassium chloride. 25.



- 26. The method of claim 20 wherein the dehydration is carried out at temperatures of  $100 \text{ to } 110^{0} \text{ F}$ .
- 27. The method of claim 18 wherein the natural substance is from an animal.
- 28. The method of claim 18 wherein the naturally occurring material is bone cartilage.
- 29. The method of claim 28 wherein the bone cartilage contains Type II collagen.
- 30. The method of dehydrating chicken cartilage which comprises comminuting such, soaking the resulting product in an aqueous solution of an antimicrobial agent, blending such with potassium or sodium chloride in a concentration of at least 15 % by weight of the comminuted product and dehydrating the resulting mixture in particulate form at temperatures below 110°F until the water content is reduced to below 10%.
- The method of claim 30 wherein the antimicrobial agent is a hypochlorite.
- 32. The process of claim 31 wherein the dehydration is carried out in the presence of hydroxy-propyl methylcellulose or lecithin.